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Success Story

AUTOMATED METHOD TO BUILD TECHNICAL DATA PACKAGES FOR COMPETITIVE PROCUREMENTS OF SPARE PARTS



By providing the Defense Logistics Agency (DLA) with technical data packages, the Department of Defense (DOD) can now outsource the assembly of critical spare parts. Critical parts can be obtained faster, cost less, and possess improved quality because the technical data packages contain accurate information for the manufacturers. The Technical Data Strategy program successfully decreased the number of nonexistent and incomplete technical data packages in a six-month period.



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Accomplishment

Under contract with the Sensors Directorate, Altech Services, Inc. developed conversion and management software for procuring critical spare parts. Using Standard for the Exchange of Product Model Data (STEP), DLA will build initial technical data packages for competitive procurements of spare parts.

This program also allows DLA to obtain missing data from the Joint Engineering Data Management Information Control System (JEDMICS) database. Without these technical data packages to procure new spare parts, many aging aircraft would lack the necessary parts to fly.

Background

Several years ago, the DLA assumed responsibility from the Air Force Materiel Command for procuring spare parts for all weapon systems in the DOD. Aging aircraft and the unwillingness of the original equipment manufacturers to manufacture replacement items, components, and parts exacerbated the problem. DLA requested assistance from the directorate in analyzing and possibly automating the current technical data package process.

Teaming with Altech Services, Inc. and the Air Logistics Center in Oklahoma City, Oklahoma, directorate engineer Ms. Janice Chinn (pictured) used automated tracking, MetaPhase® metrics capturing, and STEP data transferring to begin building and reconstructing technical data packages for procurement of spare parts. The directorate's goal over a 12-month period was to compile and complete a total of 90 technical data packages for the bidding and procurement process. During the first month, 52 technical data packages containing 2,860 images were consummated. To date, the directorate completed a total of 2,519 technical data packages for procurement of spare parts for DOD warfighters. The automated methodology to reconstruct and build initial technical data packages, and obtain the required missing data from JEDMICS and manufacturers is significantly beneficial to the Air Force E-3, B-1, B-52 and C/K-135 aging aircraft. As a result of this test program, engineers reduced the average cost to build a technical data package by more than 50% (from \$1050 to \$500) per package—a savings of over \$1.3 million.

Additional information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTT, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (01-SN-11)